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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,622	12/29/2003	Thanasis Molokotos	SAR100062000	7511
22891	7590	06/10/2005	EXAMINER	
DELIO & PETERSON 121 WHITNEY AVENUE NEW HAVEN, CT 06510			ROYAL, PAUL	
			ART UNIT	PAPER NUMBER
			3611	

DATE MAILED: 06/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/748,622

Applicant(s)

MOLOKOTOS ET AL.

Examiner

Paul Royal

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 11 is/are rejected.
- 7) ☒ Claim(s) 4-10, 12, 13, 15-17, 19 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/29/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 12/29/03 considered by the examiner on 12/07/04 as indicated in the Office Action Summary sheet (PTOL-326) of 12/16/04.

Specification

2. The previous Office Action Summary sheet (PTOL-326) erroneously indicated the disclosure was objected to. To be clear, no Specification objection has been made to date in the application.

Response to Arguments

3. Applicant's arguments filed 03/21/05 have been fully considered but they are not persuasive. See below explanation.

4. In response to applicant's argument that the LED light source of Frolov et al. '225 is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the LED's of Frolov et al. are arranged in a parallel arrays which is understood to arrange them in a planar manner.

Applicant's arguments that the number of LEDs, the use of a printed circuit control board, and supplemental indicia forming insert in Frolov et al. presents non-analogous art is not persuasive because the instant invention merely presents that it employs a "planar electroluminescent illuminator" but does not present structural or operational limitations not met by Frolov et al.

Applicant further argues the *'term "electroluminescent" is a term describing a particular category of lighting that excludes semiconductor LEDs ...'*.

The Examiner disagrees because diodes have been known as electroluminescence devices for at least the last three decades. See Logan et al. (US 3,365,630, patented 1968), Logan (3,603,833, patented 1971), Groves et al. (US 3,725,749, patented 1973), Cohen (US 3,864,721, patented 1975). Lebailly (US 3,875,473, patented 1975).

Note further that Lebailly teaches source I and source II are "planar electroluminescence" diodes manufactured on a substrate, see column 6, lines 63 to column 7, line 10.

Note also that LEDs are known to overcome the disadvantages disclosed by applicant as undesirable (bulky, fragile, non-uniform illumination and produce excessive heat) and provide the advantages disclosed as desirable (rugged, does not produce heat which could potentially burn a user touching metal components of the exit device, or which might present a fire hazard when the exit device is installed on a wooden door, must be long lasting and minimize maintenance costs), see applicant's Specification page 2, lines 1-9.

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Applicant still further argues the physics of luminescence as used in the present invention's illuminator differ so greatly from the physics of fluorescence gas discharge tubes of the applied prior art Parra, there is nothing in Parr's disclosure that can be applied to the planar electroluminescence of the present invention.

The Examiner disagrees. Parra was cited to indicate it is well known to mount and employ an inverter in a sign to provide a low cost and low energy sign. The relevant claims are merely directed to "supplying power". The prior art Parra teaches it is known to provide voltage conversion/inversion using components mounted within the sign, distinct from signs that receive voltage in a converted form and do not have on-board voltage conversion/inversion components.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 1-3 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Frolov et al. (US 6,715,225).

Frolov et al. teaches an illuminated exit device comprising:

a door latch mechanism (see column 2, lines 1-5);

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a base (12) for attachment to a surface of a door;

an elongated pushbar actuator (20) movably mounted relative to the base and connected to operate the latch mechanism when pressure is applied to the actuator;

a planar electro-luminescent illuminator (30) including electrical wiring (60,62) extending through the exit device for connection to a source of electrical power;

a planar sign (24) including opaque portions for blocking illumination from the electro-luminescent illuminator, the sign being mounted in front of the electro-luminescent illuminator, the sign forming the word "EXIT"; and

a transparent protective cover (22) mounted in front of the sign, the illuminator, sign and covering plate forming a sign assembly visibly mounted on the exit device,

wherein the sign assembly is mounted on the actuator and pressure applied to the sign assembly will operate the exit device,

the sign assembly further including a touchpad (26) mounted on the actuator, and wherein the sign assembly is mounted on the touchpad.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frolov et al. (US 6,715,225) in view of Parra (US 6,111,370).

Frolov et al. teaches an illuminated exit device having the claimed limitations except an inverter.

Parra teaches a high efficiency gas discharge exit sign including an inverter (10) supplying power to an electro-luminescent illuminator (13) to provide an improved exit sign which is low in cost and low in energy consumption.

It would have been obvious to one of ordinary skill in the art at the time for the invention to modify the illuminated exit device of Frolov et al. to replace the light emitting diodes of Frolov et al. with a base mounted inverter supplying power to an electro-luminescent illuminator, as taught by Parra, to provide an improved exit sign which is low in cost and low in energy consumption.

For claim 18, where Frolov et al. teaches mounting it's PC power/lighting board (30) adjacent the base/housing (12), it would be obvious to mount the inverter on the base/housing so that it would be near the PC board (30).

Allowable Subject Matter

7. Claims 4-10, 12, 13 and 15-17, and 19-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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8. The following is a statement of reasons for the indication of allowable subject matter:

For claims 4-8, the prior art does not show an illuminated exit device as recited in the independent claim, and as applicable to the dependent claims, which includes a touchpad having a surface cavity with the sign mounted in the surface cavity with the transparent cover positioned flush with the surface of the touchpad.

For claims 9 and 10, the prior art does not show an illuminated exit device as recited in the independent claim, and as applicable to the dependent claims, which includes opaque film attached to the transparent cover.

For claim 12, the prior art does not show an illuminated exit device as recited in the independent claim, and as applicable to the dependent claims, which includes wherein the electro-luminescent illuminator is encased in a transparent plastic comprising an electrical insulator.

For claims 13, the prior art does not show an illuminated exit device as recited in the independent claim, and as applicable to the dependent claims, which includes a touchpad having a surface cavity as recited and the exit device further including the transparent cover having tabs and the sign assembly being held in the touchpad surface cavity by engagement with the cover tabs.

For claims 15-17, the prior art does not show an illuminated exit device as recited in the independent claim, and as applicable to the dependent claims, which includes an inverter which provides high voltage AC power to the illuminator as recited.

For claims 19, the prior art does not show an illuminated exit device as recited in the independent claim, and as applicable to the dependent claims, which includes wiring extending through a base opening which faces towards the door/base mounting surface and extending from an electrical hinge to an opening in the door surface to permit connection between the power wiring and the internal wiring where the internal wiring is understood to be the wiring hidden from view within the exit device.

For claims 20, the prior art does not show an illuminated exit device as recited in the independent claim, and as applicable to the dependent claims, which includes a cover removable without removal of the exit device from the door.

Conclusion

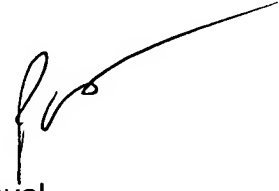
9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Logan et al. '630 teaches electroluminescent doping. Logan et al. '038 teaches an electroluminescent device. Logan teaches an electroluminescent junction diode. Groves et al. teaches an electroluminescent solid state device. Cohen teaches a tunneling electroluminescent diode. Lebailey teaches a "planar" electroluminescent device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Royal whose telephone number is 571-272-6652. The examiner can normally be reached on 8:30-4:30.

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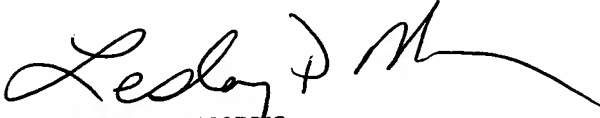
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley D. Morris can be reached on 571-272-6651. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



P. Royal
6/3/2005

Paul Royal
Examiner
Art Unit 3611



LESLEY D. MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600